

Available online at www.sciencedirect.com**SciVerse ScienceDirect**

Procedia - Social and Behavioral Sciences 76 (2013) 608 – 611

Procedia
Social and Behavioral Sciences

5th International Conference EDU-WORLD 2012 - Education Facing Contemporary World
Issues

Assessment through availability and fidelity perspective

Florica Orțan*

University of Oradea, University Street nr. 1, Postcode 410087, Oradea, Bihor, Romania

Abstract

In the first part of the paper one can attest the fact that generally it is not possible to talk about the quality of education without mentioning school evaluation/assessment, especially methods and procedures regarding it. During the paper there are described some key words on evaluation/assessment, coming from points of view of educational experts. Pointing out the relationship/link between evaluation/assessment and quality / value, talking about the complex process of it, I assert that progress of Educational Sciences depends on some elements of methodology and experiments. During the second part concepts about the availability and fidelity, ways of tackling evaluation/assessment are presented. Although the complexity of the Educational Sciences allows a subjective point of view, I am trying to find out routes and procedures to deal with correct functionality and validity of evaluation/assessment. Bearing in mind different points of view of educational experts, during the last part of the paper I focus on two important methods: 1. based on interpretation of data and the subjective evaluation/assessment in relationship with Gauss 'curve, a process similar to ZERO hypothesis, which helps in measuring the meaning of different tests, 2. experimenting and calibrating some tests based on the Romanian educational system, school subjects like Math and Science, Romanian and Foreign languages, and so on.

© 2013 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).
Selection and/or peer-review under responsibility of the University of Pitesti, Romania

Keywords: value, evaluation/ assessment, availability, fidelity, Gauss 'curve, zero hypothesis, knowledge tests, objective items, semi – objective items.

1. Introduction

Talking about the nowadays economical and financial crises one can notice the acceleration of modernity and technology. The growth of the European Community and more exactly the accession of Romania, brings after it new problems on quality and evaluation/assessment, on profitability and value selection.

School and university try to integrate into this new world, focussing on technical - like problems: new educational objectives, the use the computer on a larger scale, quantifying and measuring the items, modern ways of building a school curricula, selecting the proper method to teach and assess.

* Corresponding author. Tel.: +0-000-000-0000 ; fax: +0-000-000-0000 .
E-mail address: author@institute.xxx

Passing from Pedagogy to the Educational Sciences has as its effect the creation of a relatively autonomous field that deals directly with assessing the educational system.

The efforts of our educational specialists go towards looking for a new and clear definition. Noticing that evaluation/assessment becomes one of major educational problems, Marin Manolescu and Stan Panțuru [1] affirm that it represents a “very important variable of teaching – assessing process” and that it “has become the major concern from the point of view of procedure, of its functionality and of its part taken in the process...” (Marin Manolescu, Stan Panțuru, 2008, page 306-307)[1]

Mentioning that “ school life lies under the sign of value and availability ” Constantin Cucuș [2] asserts that school assessment “ is a process of which one can delimitate, obtain and give useful information, to later take important decisions...” (Constantin Cucuș, 2009, page 419, 424)[2]

Trying to be fully understood, Valentin Cosmin Blândul [3] asserts that “ assessing the pupils ‘ progress is a complex activity, which deals with checking and keeping the results of teaching, (process that is expressed in measurable behavior, that can be proved by pupils), quantifying it, (by adding some symbols), being given a meaning (by issuing correct and proper value judgments), or by taking decisions (for a better and objective behavior of the subjects, following the improvement of the teaching - learning process) “ (V.C.Blândul, 2012, page 224) [3]

Looking at the above definitions one can say that the problems of assessing, even at a general level, contain heterogeneous elements, maybe divergent ones, which derive from Axiology and Philosophy, or giving hints to measurement and evaluation.

I have stated in another paper that the term of Pedagogy of Assessment “derives from VALUE and so we can appreciate that assessing is relatively equal to issuing a value judgment. Sometimes assessing is in correlation with checking and feed – back of decision, where one can deduce that decision and assessment are the main poles of proper action” (Florica Orțan, 2007, page 194) [4]

Without diminishing the importance of social, moral or axiological elements, I try to focus on the operational elements, mainly on quantification and measurement, maybe trying to create quantity models and instruments to high / accurate measurement units.

The term of VALIDITY is used in the Legal Sciences, where it is said that an act is valid if all the legal requirements are fulfilled; to validate means “to confirm, to recognize its validity, its legal power, its collective source...” (DEX, 1998, page 1145) [5]

The validity term was adopted also by the Methodology of Social Sciences and was largely used in Experimental Psychology and Psycho – Diagnostic. More specifically the term of validity refers at the quality of methods in a psychological test, that is it can answer at the question on how accurate the test can be, looking as a proper instrument of measurement or appreciation.

Nicolae Mărgineanu [6] considers that “validity defines uniformity between the measurement instrument and the quantity we measure. For example the meter is the unit of length, but not for weight, where one uses the kilo...” (Nicolae Mărgineanu, 1972, cited C. Strungă, 1999, page 136) [6]

The experts in Psycho – Pedagogy see various kinds of validity. One can see the validity of content, which focuses on the harmony between the tasks of the test and the teaching process. Other notices the validity of structure, which focuses on “how accurate the test measures the specific component” (Mihai Stanciu, 2003, page 292) [7]

In the Educational Sciences one is interested on validity of convergence, which refers to fidelity, especially to validity of prediction, that “allows the achievement of prediction, due to the future evolution of the rated person” (ibid).

The problem of validity goes together with the problem of fidelity. A test of assessment becomes precise if it is given by different teachers but to the same pupils, having the same results, that is “ to offer the same results every time the test is given,” time after time, anytime. (Ausebel D.P, F.G. Robinson, 1981, page 682) [8]

Apparently the educational assessment, on one hand, and the requirements of fidelity and validity, on the other hand, are incompatible because the educational system is focusing on quality, it is very complex and uses a high number of variable; while fidelity and validity aim to a single aspect, that is stability and one single variable.

It was noticed that the intervention of different factors and some complex phenomena, such as the educational system, are not suppressing the measurement and quantification, further more it gives a vast space to operate,

requesting proper procedures, techniques and valid instruments to use. Looking at the Educational Sciences, the above mentioned problems explain the subjective point of view of assessing. One can notice, over and over again, that the assessment is subjective.

Vasile Pavelcu [9] quotes some famous cases like the one of the German philosopher G.W.F. Hegel, who was thought to be “unable for Philosophy”, or Linne, the botanist, thought as “oligophrenic”, or Sir Walter Scott, thought as “stupid”, or Anatole France and Louis Pasteur, who did not pass the A exams...”(Vasile Pavelcu, 1968, page 37) [9]

The experts in Educational Sciences were amazed by the fact that the evaluators were so wrong. Thus it came to light Docimology, as Miron Ionescu [10] states “... the first research being conducted in France, at the initiative of Henri Pieron and his wife, and later by Henri Langier, during the 1922...”(Miron Ionescu, 2005, page 317) [10]

It was found that the same Math test, having a high level of fidelity, if assessed by different teachers, the marks differ very much. So there were two problems raised for the experts in Docimology and in the Methodology of Assessing:

- the first was “how to state the subjective assessment?”
- the second was “how can it be diminished or even removed?”

An interesting statement comes from Ioan Comanescu [11], who mentioned the Gauss ‘curve in direct link to the marks of the students, as being not a good quality educational activity. He likes to be an advocate with the “fight against Gauss ‘curve”, stating that “undeniably the Gauss “curve must not become a myth, we must be able to modify it towards better and more, towards a right way asymmetry, but this modification has to have a real, actual basis of facts...”(Ioan Comanescu, 2003, page 456) [11]

Trying an open methodological approach and aiming at the diminishing of subjective assessment, Adrian Stoica [12] states that a teacher who assesses his / her students must answer to at least 7 questions:

- what is to assess? (considering the rules of validity)
- what is the purpose of assessing? (for selecting something?, for feed – back?)
- who is to assess? (a student or the whole class?)
- how do we assess? (what is the instrument to use?)
- when do we assess? (during the lesson? at an exam?)
- what do we assess with? (some elements of curricula)
- who are the beneficiary of the assessment? (Adrian Stoica, 2001, page 16 – 17) [12]

To diminish the subjective assessment Ioan Cerghit [13] recommends the replacement of an inner assessing (when the evaluator is the class teacher) with an external assessing (when the evaluator comes from another institution)

It is also recommended to create a specialized body of assessing experts, like CNEE (the National Center for Evaluation and Assessment)

One can also notice a common effort to have the same assessing rules as in OECD/PISA (Organization for Economic Co-operation and Development / PROGRAMME FOR INTERNATIONAL STUDENT ASSESSMENT), which brought together a standard assessment: that is “to express the common frame of OECD, to assess every three years the common concept of the results of educational systems in the countries within the OECD...”(M. Manolescu, 2003, page 134 – 137, cited Ioan Cerghit, 2008, page 350) [13]

The best way to diminish subjectivity is to apply new methods of assessing like portfolio or the knowledge tests.

Although it is common, the individual observation is hard to do, as there are not sufficient teachers or they are not well prepared for the objective assessing.

Speaking of the same causes one can notice the less and less individual assessment, at any stage of teaching – learning process, and mainly in university courses, where this method was changed with some free talks on the topic, more often with some written assessing. The latter, although easy and efficient to assess a large number of students, can also become subjective, so it is better to apply to the knowledge tests.

During the latest years of practice I have been a witness of the great number of experts in Educational Sciences, but also I have been in schools where teachers tried to conceive and realize objective and semi – objective items.

Unfortunately these valuable contributions are not taken into consideration, are not gathered or classified. I consider important to do it.

The traditional way of assessing, except of being very convenient, does not allow us to diminish and control the subjectivity.

The experts in assessing and nowadays the methodological centers close with universities have the duty to initiate, to organize and to complete projects of experimenting some models of knowledge tests, at least at the school subjects like Math, Romanian, Foreign Languages, Physics, Chemistry or others.

References

- [1] Manolescu, Marin, Panțuru, Stan, (2008) Teoria și practica evaluării educaționale (activități, conduite, rezultate), formale și nonformale: structuri, forme, funcții, relații, mecanisme, disfuncții. Strategii și metode de evaluare și autoevaluare. Orientări noi, în volumul Potolea, Dan, Neacșu, Ioan, R.B Iucu, I.O. Pânișoară, Pregătirea pedagogică, Iași
- [2] Cucoș, Constantin, (2009) Evaluarea școlară. Intenționalitate, procesualitate, strategii, în volumul Constantin Cucoș, Psihopedagogie, Ediția a III a, Editura Polirom, Iași
- [3] Blândul, Valentin Cosmin, (2012) Evaluare școlară: definire, etape, funcții, forme, strategii și metode (tradiționale și complementare). Elaborarea probei de evaluare. Interacțiunea predare – învățare – evaluare: semnificații și interpretări actuale, în volumul Florica Orțan, (coord), Pedagogie și elemente de psihologie, Editura Risoprint, Cluj – Napoca
- [4] Orțan, Florica, 2007, De la pedagogie la științele educației, Editura Didactică și Pedagogică, București
- [5] Academia Română, Institutul de lingvistică „Iorgu Iordan” DEX `98 Dicționar Explicativ al limbii române, (1998), Editura Univers Enciclopedic, București
- [6] Strungă, Constantin, (1999) Evaluarea școlară, Editura de Vest, Timișoara
- [7] Stanciu, Mihai, (2003) Didactica postmodernă, Editura Universitară, Suceava
- [8] Ausebel, D.P, Robinson, F.G, (1981) Învățarea în școală, Editura Didactică și Pedagogică, București
- [9] Pavelcu, Vasile, (1968) Principii de docimologie. Introducere în științele examinării, Editura Didactică și Pedagogică, București
- [10] Ionescu, Miron, (2005) Instruire și educație, Vasile Goldis University Press, Arad
- [11] Comănescu, Ioan, (2003) Prelegeri de didactică școlară, Editura Imprimeriei de Vest Oradea
- [12] Stoica, Adrian, (2001) Evaluarea curentă și examenele. Editura Serviciului Național de Evaluare și Examinare, București
- [13] Manolescu, Mihai, (2005) Evaluarea școlară, Editura Meteor Press, București,
- [14] Cerghit, Ioan, (2008) Sisteme de instruire alternative și complementare, Editura Polirom